IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:)
)   Confirmation No: 6276
    Jennifer Farrell, *et al.*   )
)   Group Art Unit: 2625
Serial No.: 10/721,703   )
)   Examiner: Qin, Yixing
Filed: November 25, 2003   )
)
For: Image Forming Device with Print Mode   )
    Actuator and Method   )   Atty. Docket No.: 200209668-1

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

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Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

This Appeal Brief under 37 C.F.R. § 41.37 is submitted in support of the Notice of Appeal filed June 18, 2008, responding to the final Office Action mailed March 18, 2008.

It is not believed that extensions of time or fees are required to consider this Appeal Brief. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. §1.136(a), and any fees required therefor are hereby authorized to be charged to Deposit Account No. 08-2025.

I. Real Party in Interest

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

II. Related Appeals and Interferences

There are no known related appeals or interferences that will affect or be affected by a decision in this Appeal.

III. Status of Claims

Claims 1-29 stand finally rejected. The final rejections of claims 1-29 are appealed.

IV. Status of Amendments

No claim amendments have been made subsequent to the final Office Action mailed March 18, 2008. The claims in the attached Claims Appendix (see below) reflect the present state of Applicants' claims.

V. Summary of Claimed Subject Matter

The claimed inventions are summarized below with reference numerals and references to the written description ("specification") and drawings. The subject matter described in the following appears in the original disclosure at least where indicated, and may further appear in other places within the original disclosure.

Embodiments according to independent claim 1 describe a method comprising receiving a document for printing in an image forming device (Figure 1, 100), wherein a print mode setting is associated with the document. Applicants' specification, pages 7-8, lines 33-9. The method further comprises printing at least a portion of the document monochromatically or in color based upon the print mode setting and a state of a print mode actuator (Figure 1, 132) in the image forming device (Figure 1, 100). Applicants' specification, page 9, lines 12-15.

Embodiments according to independent claim 9 describe a program embodied in a computer readable medium. Applicants' specification, pages 14-15, lines 31-1. The program comprises code that identifies a print mode setting associated with a document received for printing in an image forming device (Figure 1, 100), Applicants' specification, page 10, lines 22-24, and code that implements a printing of at least a portion of the document monochromatically or in color based upon the print mode setting and a state of a print mode actuator (Figure 1, 132) in the image forming device (Figure 1, 100). Applicants' specification, page 11, lines 5-19.

Embodiments according to independent claim 16 describe an image forming device (Figure 1, 100). Such a device comprises a print mode actuator (Figure 1, 132) disposed on the image forming device (Figure 1, 100) having a first state and a second

state, Applicants' specification, page 10, lines 1-4, and a print engine (Figure 2, 214) configured to implement a printing of at least a portion of a document monochromatically or in color based upon a print mode setting associated with the document and based upon a state of the print mode actuator (Figure 1, 132) in the image forming. Applicants' specification, page 11, lines 5-19.

Embodiments according to independent claim 24 describe an image forming device (Figure 1, 100). Such a device comprises means for identifying (*e.g.*, Figure 2, 220, 260) a print mode setting associated with a document received for printing in an image forming device (Figure 1, 100), Applicants' specification, page 10, lines 22-24, and means for implementing (*e.g.*, Figure 2, 220, 222, 252, 260) a printing of at least a portion of a document monochromatically or in color based upon the print mode setting and a state of a print mode actuator (Figure 1, 132) in the image forming device (Figure 1, 100). Applicants' specification, page 11, lines 5-19.

Embodiments according to independent claim 27 describe a method comprising determining a state of a print mode actuator (Figure 1, 132), the print mode actuator (Figure 1, 132) having at least an application state and a black override state. Applicants' specification, page 9, lines 12-15 and lines 22-23. The method further comprises executing a color raster image processing of a document if the print mode actuator (Figure 1, 132) is in the application state and the document includes a color print setting. Applicants' specification, page 9, lines 12-15.

VI. Grounds of Rejection to be Reviewed on Appeal

The following grounds of rejections are to be reviewed on appeal:

Claims 1-29 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Nakajima* (U.S. Patent No. 6,701,011).

VII. Arguments

Claims 1-29 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Nakajima* (U.S. Patent No. 6,701,011). Applicants respectfully traverse the rejection.

a.   Applicants' Claims 1-8

As provided in independent claim 1, Applicants claim:

> A method, comprising:
> receiving a document for printing in an image forming device, wherein a print mode setting is associated with the document; and
> ***printing at least a portion of the document monochromatically or in color based upon the print mode setting and a state of a print mode actuator in the image forming device.***

(Emphasis added).

Applicants respectfully submit that independent claim 1 is allowable for at least the reason that *Nakajima* does not disclose, teach, or suggest at least "printing at least a portion of the document monochromatically or in color based upon the print mode setting and a state of a print mode actuator in the image forming device," as emphasized above.

For example, *Nakajima* describes an image processing apparatus 1 that produces output data for a printer device 3 or display device 4. *Nakajima* discloses that

the "image processing-apparatus preferably determines whether the printer device is a color or monochrome machine and whether the printer device is in a color mode or monochrome mode, and performs image processing using the value/contrast parameters only out of the two types of parameters when the printer device is a monochrome machine or when the printer device is in a monochrome mode." *See* col. 21, lines 52-59. Further, Figs. 16A-16B of *Nakajima* show an exemplary graphical interface that may be used to set the color/monochrome mode for the printer. Fig. 19 of *Nakajima* also shows that color processing mode selector 15B is a component of the image processing apparatus 1. It is also noted that printer device 3 is external to the image processing apparatus 1 and color processing mode selector 15B. As such, *Nakajima* fails to teach or suggest at least "printing at least a portion of the document monochromatically or in color based upon the print mode setting and a state of a print mode actuator in the image forming device," as recited in claim 1. For example, the printer device 3 in *Nakajima* is not disclosed to contain a print mode actuator. Also, the color processing mode selector of *Nakajima* seems to describe a print mode setting and not a print mode actuator, as described in the claim. Accordingly, *Nakajima* does not disclose the operation of printing at least a portion of the document monochromatically or in color based upon (a) the print mode setting and (b) a state of a print mode actuator in the image forming device, as described in claim 1.

As a result, claim 1 is patentable over *Nakajima*, and the rejection of claim 1 should be overturned. Since claims 2-8 depend from claim 1 and recite additional features, claims 2-8 are allowable as a matter of law over the cited art of record and the rejections of claims 2-8 should also be overturned.

b.   Applicants' Claims 9-15

As provided in independent claim 9, Applicants claim:

A program embodied in a computer readable medium, comprising:
code that identifies a print mode setting associated with a document received for printing in an image forming device; and
code that implements a printing of at least a portion of the document monochromatically or in color based upon the print mode setting and a state of a print mode actuator in the image forming device.

(Emphasis added).

Applicants respectfully submit that independent claim 9 is allowable for at least the reason that *Nakajima* does not disclose, teach, or suggest at least "code that implements a printing of at least a portion of the document monochromatically or in color based upon the print mode setting and a state of a print mode actuator in the image forming device," as emphasized above.

For example, *Nakajima* describes an image processing apparatus 1 that produces output data for a printer device 3 or display device 4. *Nakajima* discloses that the "image processing-apparatus preferably determines whether the printer device is a color or monochrome machine and whether the printer device is in a color mode or monochrome mode, and performs image processing using the value/contrast parameters only out of the two types of parameters when the printer device is a monochrome machine or when the printer device is in a monochrome mode." *See* col. 21, lines 52-59. Further, Figs. 16A-16B of *Nakajima* show an exemplary graphical interface that may be used to set the color/monochrome mode for the printer. Fig. 19 of *Nakajima* also shows that color processing mode selector 15B is a component of the image processing apparatus 1. It is also noted that printer device 3 is external to the image processing apparatus 1 and color processing mode selector 15B. As such,

Nakajima fails to teach or suggest at least "code that implements a printing of at least a portion of the document monochromatically or in color based upon the print mode setting and a state of a print mode actuator in the image forming device," as recited in claim 9. For example, the printer device 3 in *Nakajima* is not disclosed to contain a print mode actuator. Also, the color processing mode selector of *Nakajima* seems to describe a print mode setting and not a print mode actuator, as described in the claim. Accordingly, *Nakajima* does not disclose the operation of printing at least a portion of the document monochromatically or in color based upon (a) the print mode setting and (b) a state of a print mode actuator in the image forming device, as described in claim 9.

As a result, claim 9 is patentable over *Nakajima*, and the rejection of claim 9 should be overturned. Since claims 10-15 depend from claim 9 and recite additional features, claims 10-15 are allowable as a matter of law over the cited art of record and the rejections of claims 10-15 should also be overturned.

c.   Applicants' Claims 16-23

As provided in independent claim 16, Applicants claim:

> An image forming device, comprising:
> a print mode actuator disposed on the image forming device having a first state and a second state; and
> ***a print engine configured to implement a printing of at least a portion of a document monochromatically or in color based upon a print mode setting associated with the document and based upon a state of the print mode actuator in the image forming.***

(Emphasis added).

Applicants respectfully submit that independent claim 16 is allowable for at least the reason that *Nakajima* does not disclose, teach, or suggest at least "a print engine

configured to implement a printing of at least a portion of a document monochromatically or in color based upon a print mode setting associated with the document and based upon a state of the print mode actuator in the image forming," as emphasized above.

For example, *Nakajima* describes an image processing apparatus 1 that produces output data for a printer device 3 or display device 4. *Nakajima* discloses that the "image processing-apparatus preferably determines whether the printer device is a color or monochrome machine and whether the printer device is in a color mode or monochrome mode, and performs image processing using the value/contrast parameters only out of the two types of parameters when the printer device is a monochrome machine or when the printer device is in a monochrome mode." *See* col. 21, lines 52-59. Further, Figs. 16A-16B of *Nakajima* show an exemplary graphical interface that may be used to set the color/monochrome mode for the printer. Fig. 19 of *Nakajima* also shows that color processing mode selector 15B is a component of the image processing apparatus 1. It is also noted that printer device 3 is external to the image processing apparatus 1 and color processing mode selector 15B. As such, *Nakajima* fails to teach or suggest at least "a print engine configured to implement a printing of at least a portion of a document monochromatically or in color based upon a print mode setting associated with the document and based upon a state of the print mode actuator in the image forming," as recited in claim 16. For example, the printer device 3 in *Nakajima* is not disclosed to contain a print mode actuator. Also, the color processing mode selector of *Nakajima* seems to describe a print mode setting and not a print mode actuator, as described in the claim. Accordingly, *Nakajima* does not disclose

the operation of printing at least a portion of the document monochromatically or in color based upon (a) the print mode setting and (b) a state of a print mode actuator in the image forming device," as described in claim 16.

As a result, claim 16 is patentable over *Nakajima*, and the rejection of claim 16 should be withdrawn. Since claims 17-23 depend from claim 16 and recite additional features, claims 17-23 are allowable as a matter of law over the cited art of record and the rejections of claims 17-23 should also be overturned.

d.   <u>Applicants' Claims 24-26</u>

As provided in independent claim 24, Applicants claim:

> An image forming device, comprising:
> means for identifying a print mode setting associated with a document received for printing in an image forming device; and
> **means for implementing a printing of at least a portion of a document monochromatically or in color based upon the print mode setting and a state of a print mode actuator in the image forming device.**

(Emphasis added).

Applicants respectfully submit that independent claim 24 is allowable for at least the reason that *Nakajima* does not disclose, teach, or suggest at least "means for implementing a printing of at least a portion of a document monochromatically or in color based upon the print mode setting and a state of a print mode actuator in the image forming device," as emphasized above.

For example, *Nakajima* describes an image processing apparatus 1 that produces output data for a printer device 3 or display device 4. *Nakajima* discloses that the "image processing-apparatus preferably determines whether the printer device is a color or monochrome machine and whether the printer device is in a color mode or

monochrome mode, and performs image processing using the value/contrast parameters only out of the two types of parameters when the printer device is a monochrome machine or when the printer device is in a monochrome mode." *See* col. 21, lines 52-59. Further, Figs. 16A-16B of *Nakajima* show an exemplary graphical interface that may be used to set the color/monochrome mode for the printer. Fig. 19 of *Nakajima* also shows that color processing mode selector 15B is a component of the image processing apparatus 1. It is also noted that printer device 3 is external to the image processing apparatus 1 and color processing mode selector 15B. As such, *Nakajima* fails to teach or suggest at least "means for implementing a printing of at least a portion of a document monochromatically or in color based upon the print mode setting and a state of a print mode actuator in the image forming device," as recited in claim 24. For example, the printer device 3 in *Nakajima* is not disclosed to contain a print mode actuator. Also, the color processing mode selector of *Nakajima* seems to describe a print mode setting and not a print mode actuator, as described in the claim. Accordingly, *Nakajima* does not disclose the operation of printing at least a portion of the document monochromatically or in color based upon (a) the print mode setting and (b) a state of a print mode actuator in the image forming device, as described in claim 24.

As a result, claim 24 is patentable over *Nakajima*, and the rejection of claim 24 should be overturned. Since claims 25-26 depend from claim 24 and recite additional features, claims 25-26 are allowable as a matter of law over the cited art of record and the rejections of claims 25-26 should also be overturned.

e.   Applicants' Claims 27-29

As provided in independent claim 27, Applicants claim:

> A method, comprising:
> determining a state of a print mode actuator, the print mode actuator having at least an application state and a black override state; and
> ***executing a color raster image processing of a document if the print mode actuator is in the application state and the document includes a color print setting.***

(Emphasis added).

Applicants respectfully submit that independent claim 27 is allowable for at least the reason that *Nakajima* does not disclose, teach, or suggest at least "executing a color raster image processing of a document if the print mode actuator is in the application state and the document includes a color print setting," as emphasized above.

For example, *Nakajima* describes an image processing apparatus 1 that produces output data for a printer device 3 or display device 4. *Nakajima* discloses that the "image processing-apparatus preferably determines whether the printer device is a color or monochrome machine and whether the printer device is in a color mode or monochrome mode, and performs image processing using the value/contrast parameters only out of the two types of parameters when the printer device is a monochrome machine or when the printer device is in a monochrome mode." *See* col. 21, lines 52-59. Further, Figs. 16A-16B of *Nakajima* show an exemplary graphical interface that may be used to set the color/monochrome mode for the printer. Fig. 19 of *Nakajima* also shows that color processing mode selector 15B is a component of the image processing apparatus 1. It is also noted that printer device 3 is external to the image processing apparatus 1 and color processing mode selector 15B. As such,

Nakajima fails to teach or suggest at least "executing a color raster image processing of a document if the print mode actuator is in the application state and the document includes a color print setting," as recited in claim 27. For example, the printer device 3 in *Nakajima* is not disclosed to contain a print mode actuator. Also, the color processing mode selector of *Nakajima* seems to describe a print mode setting and not a print mode actuator, as described in the claim. Accordingly, *Nakajima* does not disclose the operation of printing at least a portion of the document monochromatically or in color based upon (a) the print mode setting and (b) a state of a print mode actuator in the image forming device, as described in claim 27.
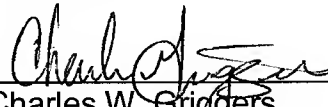
As a result, claim 27 is patentable over *Nakajima*, and the rejection of claim 27 should be withdrawn. Since claims 28-29 depend from claim 27 and recite additional features, claims 28-29 are allowable as a matter of law over the cited art of record and the rejections of claims 28-29 should also be overturned.

III. Conclusion

In summary, it is Applicants' position that Applicants' claims are patentable over the applied cited art references and that the rejection of these claims should be overturned. Appellant therefore respectfully requests that the Board of Appeals overturn the Examiner's rejection and allow Applicants' pending claims.

Respectfully submitted,

By: _____
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Claims Appendix under 37 C.F.R. § 41.37(c)(1)(viii)

The following are the claims that are involved in this Appeal.

1.   A method, comprising:

receiving a document for printing in an image forming device, wherein a print mode setting is associated with the document; and

printing at least a portion of the document monochromatically or in color based upon the print mode setting and a state of a print mode actuator in the image forming device.

2.   The method of claim 1, wherein the printing of the at least a portion of the document monochromatically or in color based upon the print mode setting and the state of the print mode actuator in the image forming device further comprises implementing an execution of a monochromatic raster image processing of the document if the print mode setting specifies a monochromatic print setting.

3.   The method of claim 1, wherein the print mode actuator includes at least an application state and a monochromatic override state, and the printing of the at least a portion of the document monochromatically or in color based upon the print mode setting and the state of the print mode actuator in the image forming device further comprises implementing an execution of a color raster image processing of the document if the print mode actuator is in the application state and the print mode setting specifies a color print setting.

4.   The method of claim 1, wherein the print mode actuator includes at least an application state and a monochromatic override state, and the printing of the at least a portion of the document monochromatically or in color based upon the print mode setting and the state of the print mode actuator in the image forming device further comprises implementing an execution of a monochromatic raster image processing of the document if the print mode actuator is in the monochromatic override state and the print mode setting specifies a color print setting, thereby overriding the color print setting in the document.

5.   The method of claim 1, further comprising:

implementing an execution of a raster image processing of the document, wherein the raster image processing is of one of a monochromatic raster image processing or a color raster image processing;

detecting a change in the state of the print mode actuator during the execution of the raster image processing of the document; and

transitioning the raster image processing of the document at a transition point in response to the change in the state of the print mode actuator.

6.   The method of claim 5, wherein the transitioning is upon completion of the monochromatic or color raster image processing of a strip of the document that was in progress at the time of the change in the state of the print mode actuator.

7.   The method of claim 5, wherein the transitioning is upon completion of the monochromatic or color raster image processing of a page of the document that was in progress at the time of the change in the state of the print mode actuator.

8.   The method of claim 1, further comprising:

executing one of a monochromatic raster image processing or a color raster image processing of the document;

detecting a change in the state of the print mode actuator during the execution of the one of the monochromatic raster image processing or the color raster image processing of the document; and

completing the monochromatic raster image processing or the color raster image processing of the document even though a change in the state of the print mode actuator is detected that results in an inconsistency between the state of the print mode actuator and the raster image processing of the document that was in progress at the time of the change in the state of the print mode actuator.

9.   A program embodied in a computer readable medium, comprising:

code that identifies a print mode setting associated with a document received for printing in an image forming device; and

code that implements a printing of at least a portion of the document monochromatically or in color based upon the print mode setting and a state of a print mode actuator in the image forming device.

10. The program embodied in the computer readable medium of claim 9, wherein code that implements the printing of the at least a portion of the document monochromatically or in color based upon the print mode setting and the state of the print mode actuator in the image forming device further comprises code that implements an execution of a monochromatic raster image processing of the document if the print mode setting specifies a monochromatic print setting.

11. The program embodied in the computer readable medium of claim 9, wherein the print mode actuator includes at least an application state and a monochromatic override state, and the code that implements the printing of the at least a portion of the document monochromatically or in color based upon the print mode setting and the state of the print mode actuator in the image forming device further comprises code that implements an execution of a color raster image processing of the document if the print mode actuator is in the application state and the print mode setting specifies a color print setting.

12.   The program embodied in the computer readable medium of claim 9, wherein the print mode actuator includes at least an application state and a monochromatic override state, and the code that implements the printing of the at least a portion of the document monochromatically or in color based upon the print mode setting and the state of the print mode actuator in the image forming device further comprises code that implements an execution of a monochromatic raster image processing of the document if the print mode actuator is in the monochromatic override state and the print mode setting specifies a color print setting, thereby overriding the color print setting in the document.

13.   The program embodied in the computer readable medium of claim 9, further comprising:

code that implements an execution of a raster image processing of the document, wherein the raster image processing is one of a monochromatic raster image processing or a color raster image processing;

code that detects a change in the state of the print mode actuator during the execution of the raster image processing of the document; and

code that transitions the raster image processing of the document at a transition point in response to the change in the state of the print mode actuator.

14.   The program embodied in the computer readable medium of claim 13, wherein the code that transitions further comprises code that implements the transition upon completion of the monochromatic or color raster image processing of a strip of the document that was in progress at the time of the change in the state of the print mode actuator.

15.   The program embodied in the computer readable medium of claim 13, wherein the code that transitions further comprises code that implements the transition upon completion of the monochromatic or color raster image processing of a page of the document that was in progress at the time of the change in the state of the print mode actuator.

16.   An image forming device, comprising:

a print mode actuator disposed on the image forming device having a first state and a second state; and

a print engine configured to implement a printing of at least a portion of a document monochromatically or in color based upon a print mode setting associated with the document and based upon a state of the print mode actuator in the image forming.

17.   The image forming device of claim 16, wherein print engine is further configured to implement an execution a monochromatic raster image processing of the document if the print mode setting specifies a monochromatic print setting.

18.   The image forming device of claim 16, wherein the first state is an application state and the second state is a monochromatic override state, and the print engine is further configured to implement an execution of a color raster image processing of the document if the print mode actuator is in the application state and the print mode setting specifies a color print setting.

19.   The image forming device of claim 16, wherein the first state is an application state and the second state is a monochromatic override state, and the print engine is further configured to implement an execution of a monochromatic raster image processing of the document if the print mode actuator is in the monochromatic override state and the print mode setting specifies a color print setting, thereby overriding the color print setting in the document.

20.   The image forming device of claim 16, the print engine is further configured to detect a change in the state of the print mode actuator during an execution of a raster image processing of the document, wherein the raster image processing is one of a monochromatic raster image processing or a color raster image processing.

21.   The image forming device of claim 20, the print engine is further configured to implement a transition of the raster image processing of the document at a transition point in response to the change in the state of the print mode actuator.

22. The image forming device of claim 21, wherein the print engine is further configured to implement the transition upon completion of the monochromatic or color raster image processing of a strip of the document that was in progress at the time of the change in the state of the print mode actuator.

23. The image forming device of claim 21, wherein the print engine is further configured to implement the transition upon completion of the monochromatic or color raster image processing of a page of the document that was in progress at the time of the change in the state of the print mode actuator.

24. An image forming device, comprising:

means for identifying a print mode setting associated with a document received for printing in an image forming device; and

means for implementing a printing of at least a portion of a document monochromatically or in color based upon the print mode setting and a state of a print mode actuator in the image forming device.

25. The image forming device of claim 24, further comprising means for detecting a change in the state of the print mode actuator during an execution of a raster image processing of the document, wherein the raster image processing is one of a monochromatic raster image processing or a color raster image processing.

26. The image forming device of claim 25, further comprising means for implementing a transition of the raster image processing of the document at a transition point in response to the change in the state of the print mode actuator.

27. A method, comprising:

determining a state of a print mode actuator, the print mode actuator having at least an application state and a black override state; and

executing a color raster image processing of a document if the print mode actuator is in the application state and the document includes a color print setting.

28. The method of claim 27, further comprising:

executing a black raster image processing of the document if the document includes a black print setting; and

executing a black raster image processing of a document if the print mode actuator is in the black override state and the document includes a color print setting, thereby overriding the color print setting in the document.

29.   The method of claim 28, further comprising:

detecting a change of the print mode actuator during one of the executing the black raster image processing and the executing the color raster image processing of the document; and

transitioning between the executing the black raster image processing and the executing the color raster image processing of the document at a transition point in response to the change in the state of the print mode actuator.

Evidence Appendix under 37 C.F.R. § 41.37(c)(1)(ix)

There is no extrinsic evidence to be considered in this Appeal. Therefore, no evidence is presented in this Appendix.

Related Proceedings Appendix under 37 C.F.R. § 41.37(c)(1)(x)

There are no related proceedings to be considered in this Appeal. Therefore, no such proceedings are identified in this Appendix.